Topic: Crimes in Chicago 1988-1998
Goal(s): 6,8,10
Skills: Rounding off numbers, Calculating percent change and graphing data

What's the context?
Comparing the number of crimes committed in Chicago over a decade
(1988-1998)

Which data will students use?
Total Crime Index for Chicago 1988-1998

What will students learn from this project?
Know how – what will they be able to do better?
Create a line graph
Round off numbers and calculate percent change

Know what – what idea(s) will they clarify through the project?
Analyze and compare data over a period of time (one decade)
Utilize percent change as a way of observing number patterns over time.

What's the challenge?
1). Look over the crime data for the years 1988-1998 and look for any patterns in the numbers.
2). Create a line graph with the years posted along the horizontal axis and the number of total crimes committed on the vertical axis.
   - It will be necessary to round off the crime numbers (thousands place) and help students figure out the increments and numbering for the line graph.
   - It will also be appropriate for numbering to range from 250,000 to 325,000, because all numbers on the chart will fall within this range.
3). Calculate the percent change in total number of crimes for each year to see which years had the greatest increase/decrease in total crimes.
   - Percent change is calculated by dividing the amount of change that has taken place from year #1 to year #2 by the original amount of crime that took place on year #1. For example, if 280,000 crimes were committed in 1988 and 304,000 crimes were committed in 1989, this increase of 24,000 crimes is divided by 280,000, which gives a decimal of .0857 or an 8.6 %increase in total crimes committed.

Checkpoint: students can share examples of how they organized and numbered their graphs. Students can then report to the class on how they figured out their calculations for percent change.